

In the Claims

Please amend claims 1, 13, 14, 22, 26, 29 and 33 as set forth below, and as indicated in attached Appendix A. A clean copy of all pending claims 1-29, 32-36 is provided in attached Appendix B. Also, please cancel claims 30 and 31 without prejudice.

1. (Twice amended) A method of transporting data over a synchronous digital network, said method comprising the steps of:

31 generating in parallel a plurality of synchronous virtual containers, each at a lower bit rate than a bit rate of said data, each said virtual container having a payload section;

31 associating said plurality of virtual containers with each other by means of assigning association data describing said association into said plurality of virtual containers;

31 inputting said transported data into said payloads of said plurality of virtual containers; and

31 outputting said plurality of associated virtual containers onto a synchronous digital network.

13. (Twice amended) Apparatus for incorporating data input at a first data rate into a plurality of streams of synchronous digital hierarchy virtual containers each output at a second data rate, said apparatus comprising:

32 means for continuously generating a plurality of virtual containers in parallel;

32 means for generating data describing an association of said plurality of virtual containers, and for assigning said association data to said plurality of associated virtual containers; and

32 means for inserting said first data rate data into said plurality of payloads of said plurality of virtual containers.

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14. (Twice amended) A method of recovering data from a plurality of synchronous virtual containers, said method comprising the steps of:

- receiving said plurality of virtual containers;
- identifying an association data from said plurality of virtual containers, said association data indicating an association between individual ones of said plurality of virtual containers;
- reading data bytes from each payload of said plurality of associated virtual containers; and
- re-assembling said data from said plurality of read payload data bytes.

B3
C1

22. (Twice amended) A method of recovering data carried in payloads of a plurality of associated synchronous digital hierarchy virtual containers, said method comprising the steps of:

- for each said virtual container:
- reading data indicating an association between said virtual container and other ones of said plurality of virtual containers;
- allocating a memory storage area for storing a payload of said virtual container;
- inputting said virtual container payload into said memory area; and
- reading said data from said memory area in parallel with data read from other said memory areas corresponding to payloads of other said virtual containers of said plurality of virtual containers.

B4
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26. (Twice amended) A method of recovering a data block carried in a plurality of payloads of a plurality of associated synchronous digital hierarchy virtual containers, said method comprising steps of:

- receiving a plurality of streams of said plurality of associated virtual containers;
- for each said received virtual container stream allocating a corresponding respective memory area for storage of data payloads of virtual containers of said stream;

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storing said plurality of virtual container payloads in said corresponding allocated memory areas; and
reading individual bytes of said plurality of stored virtual container data payloads in sequence to reconstruct said data block.

29. (Twice amended) Apparatus for recovering data from a plurality of synchronous digital hierarchy virtual containers containing said data, said means comprising:
a random access memory configured into a plurality of individual memory areas allocated for storage of payloads of said plurality of virtual containers;
a data processor means operating to identify an association data of said virtual containers, said association data indicating an association of said plurality of virtual containers; and
means for generating a plurality of read pointers operating to successively read a plurality of memory locations of said memory areas for recovering said data from said plurality of virtual containers.

33. A method as claimed in claim 32, wherein indicating a time at which each virtual container was generated relative to other associated virtual containers is incorporated over several virtual containers by utilizing one or more bits from the payload of each successive virtual container of an association of virtual containers.
